authorization" to requesting computer system 100 as per block 435. To accomplish this, the quoted configuration (FRU inventory), warranty type and time period are wrapped with a digital signature to actually form the "warranty authorization" that is sent to the requesting computer. The unique identification number of the requesting

5   computer (e.g. serial number) is also included in the warranty authorization. This signed warranty authorization now represents the customer's warranty rights for the particular configuration contained therein.

As per block 440, secure processor 150 on requesting computer system 100

10   receives the warranty authorization. Secure processor 150 then tests the warranty authorization to see if it is valid. To test the digitally signed warranty authorization for validity (block 445), secure processor 150 first verifies the digital signature for the warranty authorization. If the signature is not valid, then the warranty upgrade is rejected as per block 455 and process flow continues back to START block 400 at

15   which the warranty upgrade program can be run again at a later time. If the signature is valid, secure processor 150 then compares the quoted configuration (inventory) in the warranty authorization received from warranty server 300 with the actual configuration of requesting computer system 100. If these two match, then the warranty authorization is valid and secure processor 150 stores the warranty

20   authorization in secure storage 215 as per block 450. If the quoted configuration does not match the actual configuration, then the warranty upgrade is rejected as per block 455 and process flow continues back to START block 400 at which the warranty upgrade program can be run again at a later time.

25   Communications link 315 is conveniently implemented as an Internet connection between requesting computer system 100 and warranty server 300. However other communications links may be employed as well, such as electromagnetic, radio frequency, cable and optical links for example.

30   FIG. 4 provides more information with respect to the warranty information stored on warranty server 300 after a warranty transaction is completed. More particularly, for each warranted computer system 100, warranty server 300 stores a unique computer ID number, for example a serial number, a Service Tag number or

an Express Service Code number. The specifics of the warranted configuration are also stored, namely the inventory of FRU's or components making up the warranted computer system 100. The type of warranty is also stored, for example a parts and labor warranty or a parts-only warranty. The time period of the warranty for each

5   computer system 100 is also stored in warranty server 300. Warranty server 300 includes or has access to a database 310 that provides reliability and warranty cost data for components in allowed configurations.

Now that warranty information for requesting computer 100 is stored in

10   warranty server 300 and warranty authorization information including the authorized configuration is securely stored in requesting computer 100, a typical subsequent user warranty call to the warranty service provider is considered. When a customer calls the warranty service provider for warranty service for the 100 GB hard drive in her 2 GHz computer system, she is requested to provide her unique computer ID

15   number. The warranty service provider then accesses the warranty server database 310 configuration information corresponding to that particular computer. The provider finds that the 100 GB drive is indeed contained in the warranted configuration and that the warranty period is still running. The customer is advised that the warranty covers the part and a new drive is dispatched to the customer or

20   another service arrangement is made. In another scenario, it is possible that the customer has installed an expensive aftermarket advanced video graphics controller in her machine. This controller is not the controller included in the configuration for the upgraded warranty. The aftermarket video controller malfunctions and the customer then calls for service. In this situation, the warranty service provider

25   accesses the database for this particular computer system and finds no such aftermarket graphics controller. The customer is politely informed that the controller is not the warranted controller. It is noted that the call by the customer to the warranty service provider could be a telephone call, or a query from the user's computer to the warranty server with an automated response being provided directly

30   by the warranty server.

As mentioned earlier, when warranty server 300 determines the warranty price for a particular configuration, a number of factors are considered by the agent.

One factor is the warranty value of any components that are already under warranty. For example, in a particular computer system 100 a first component or module may have 2 years of warranty left; a second component or module may have 1 year of warranty left; and a third component or module may have a full 3 years of warranty

5   left. These values are factored into the warranty price determined and offered by agent 305 in warranty server 300. More particularly, when the warranty-requesting computer system 100 sends its configuration information to warranty server 300, the agent reads each component number from the configuration and associates each component with a corresponding component in its database which stores how much

10   warranty is currently assigned to, or remaining on, such component. Also, failure rate history for certain components can be accessed in the database and used as a factor in determining the upgrade warranty price. For example, it is known that as power supplies age, their failure rate increases. If the computer system user wants to increase the warranty beyond the base warranty (the original warranty), then the

15   failure rate of power supplies with age is a valid factor in pricing the upgrade warranty. This information would typically be used as a factor mandating an increase in the overall warranty upgrade price for a computer system with an older power supply.

20   The warranty request-processing agent 305 in warranty server 300 can be implemented completely in software or in software with some human oversight. When implemented completely in software, the agent 305 interprets the warranty database 310 of the warranty server in response to a warranty upgrade request from warranty requesting computer 100. The agent correlates the components of the

25   configuration sent from warranty requesting computer 100 (namely both their piece part numbers and their serial numbers) using the factors described above to determine a unique warranty fee for a particular computer configuration. Once the warranty is priced, quoted and fulfilled as described earlier, warranty server 300 wraps the quoted configuration, warranty type and time period together with a digital

30   signature to form the "warranty authorization" which is sent back to requesting computer 100.